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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,813	12/16/2003	Cameron J.R. Clarke	P69382US0	2868
136	7590	05/30/2006		
JACOBSON HOLMAN PLLC 400 SEVENTH STREET N.W. SUITE 600 WASHINGTON, DC 20004			EXAMINER DANIELS, MATTHEW J	
			ART UNIT	PAPER NUMBER
			1732	

DATE MAILED: 05/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/735,813

Applicant(s)

CLARKE, CAMERON J.R.

Examiner

Matthew J. Daniels

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) 19-22 and 38-44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 23-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/11/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. **Claims 19-22 and 38-44** are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 15 March 2006. A species restriction was also set forth in the Office Action mailed 15 September 2005. However, upon further consideration the species restriction requirement is withdrawn, and Claims 34-37 are rejoined. Claims 1-18 and 23-37 have been examined.

Oath/Declaration

2. The declaration filed 24 May 2004 is objected to as being illegible. The required statements cannot be located in the document. A legible copy of the declaration is requested.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the spring bias of **Claim 27** must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing

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should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 32, 35, 36, and 37** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. **As to Claim 32**, “may include” does not set forth whether the claimed colouring agent is or is not included. **As to Claim 35**, “removing the masking tool to the remaining surface” is unclear and indefinite as to what is being sought. **As to Claims 36 and 37**, “typically” does not set forth whether the claimed element is or is not of a cementitious material.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 1-3, 7-17** rejected under 35 U.S.C. 102(b) as being anticipated by Diana (USPN 4769191). The Examiner sets forth the following definitions for “mat”:

1 : a : (1) : a piece of coarse, woven, plaited, or felted fabric used especially as a floor covering or a support **(2) :** a piece of material placed at a door for wiping soiled shoe soles **b :** a decorative piece of material used under a small item (as a dish) especially for support or protection **c :** a large thick pad or cushion used as a surface for wrestling, tumbling, and gymnastics

2 : something made up of densely tangled or adhering strands especially of organic matter <algal *mat*> <a *mat* of unkempt hair>

3 : a large slab usually of reinforced concrete used as the supporting base of a building

As to **Claim 1**, Diana teaches a method for manufacturing a constructional panel comprising the steps of:

providing a mould mat (5:7-9) comprising a plurality of raised ribs (Fig. 8, item 70), the ribs defining recesses therebetween and the raised ribs having upper face contours (Fig. 8, item 70);

placing a mask on the mould mat ribs to substantially cover at least the upper surface of the ribs (Fig. 8, item 60);

casting a cementitious material in the mould (4:25); and

removing the cast panel thus formed from the mould (inherent).

As to Claims 2 and 3, Diana teaches applying a gravitational pressure force to substantially seal the mask to the upper surface of the ribs (Fig. 8, items 60 and 70). **As to Claims 7-9**, see Fig. 7, item 32, 5:22-6:11, and 7:40-54. The Examiner's position is that because muratic acid attacks masonry, that it would have inherently removed retarder. **As to Claims 10-13**, see 5:1-6:11, in particular 5:35-63. **As to Claim 14**, see Figs. 8 and 10 (Fig. 8, mask present, Fig. 10, mask removed). **As to Claim 15**, see Fig. 7, items 32 and 39. **As to Claim 16**, see Fig. 7, items 33, 36, 39. **As to Claim 17**, see Fig. 7, item 33.

6. **Claim 18** is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Diana (USPN 4769191). **As to Claim 18**, it is unclear whether Diana's mask can be considered a "grid", which is defined by a dictionary as: a network of uniformly spaced horizontal and perpendicular lines (as for locating points on a map); *also* : something resembling such a network <a road *grid*>. The Examiner's position is that in Fig. 1, the structure shown is a "grid", and additionally that the structures of Fig. 17 and Fig. 8 (elements 60, 63, and 62 collectively) form a grid of uniformly spaced lines. However, in the alternative that the particular elements shown and disclosed cannot be considered a grid because they are not shown as uniformly spaced and perpendicularly arranged, it is the Examiner's position that the particular shapes and sizes of the block forms of Diana represents an artistic variable that could be varied to produce any desired appearance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1-3, 7-18** rejected under 35 U.S.C. 103(a) as being unpatentable over Diana (USPN 4769191) in view of Long (USPN 1571849). **As to Claim 1**, Diana teaches a method for manufacturing a constructional panel comprising the steps of:

providing a mould comprising a plurality of raised ribs (Fig. 8, item 70), the ribs defining recesses therebetween and the raised ribs having upper face contours (Fig. 8, item 70);

placing a mask on the mould mat ribs to substantially cover at least the upper surface of the ribs (Fig. 8, item 60);

casting a cementitious material in the mould (4:25); and

removing the cast panel thus formed from the mould (inherent).

In the case that Diana's mold cannot be considered to be a "mould mat", the use of a mould mat would have been prima facie obvious for two reasons. Firstly, it is generally considered prima facie obvious to make portions separable. See *In re Dulberg*, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961). In this case, it would have been considered desirable to provide a separable mat in order to provide the ability to vary the cross section, shape, or configuration of the mortar joints. Secondly, Long also teaches a mould mat (Fig. 3, Item 10). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Long into the method of Diana in order to provide the

ability to vary the shape and configuration of the mortar spaces without fabricating a new mold for each design.

As to Claims 2 and 3, Diana teaches applying a gravitational pressure force to substantially seal the mask to the upper surface of the ribs (Fig. 8, items 60 and 70). **As to Claims 7-9**, see Fig. 7, item 32, 5:22-6:11, and 7:40-54. The Examiner's position is that because murtic acid attacks masonry, that it would have inherently removed retarder. **As to Claims 10-13**, see 5:1-6:11, in particular 5:35-63. **As to Claim 14**, see Figs. 8 and 10 (Fig. 8, mask present, Fig. 10, mask removed). **As to Claim 15**, see Fig. 7, items 32 and 39. **As to Claim 16**, see Fig. 7, items 33, 36, 39. **As to Claim 17**, see Fig. 7, item 33. **As to Claim 18**, it is unclear whether Diana's mask can be considered a "grid", which is defined by a dictionary as: a network of uniformly spaced horizontal and perpendicular lines (as for locating points on a map); *also* : something resembling such a network <a road *grid*>. The Examiner's position is that in Fig. 1, the structure shown is a "grid", and additionally that the structures of Fig. 17 and Fig. 8 (elements 60, 63, and 62 collectively) form a grid of uniformly spaced lines. However, in the alternative that the particular elements shown and disclosed cannot be considered a grid because they are not shown as uniformly spaced and perpendicularly arranged, it is the Examiner's position that the particular shapes and sizes of the block forms of Diana represents an artistic variable that could be varied to produce any desired appearance.

8. **Claims 4-6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Diana (USPN 4769191) in view of Long (USPN 1571849), and further in view of Fougea (USPN 3195207). Diana and Long teach the subject matter of Claim 2 above under 35 USC 103(a). **As to Claims**

4-6, Diana and Long are silent to the mould mat and/or mask being restrained by a magnetic force and to the mould mat and/or mask being magnetized and formed of a magnetic material. However, these aspects would have been prima facie obvious over Fougéa, who teaches that it is desirable to position objects using a magnetic table. Specifically, Fougéa teaches elements having a rectangular or square shape to be arranged inside the molding perimeter so as to form desired openings in concrete elements (2:56-65). In the combined method, forming the mould mat and/or mask of magnetic materials would have been obvious in order to fix these parts in association with the electromagnetic means. It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Fougéa into that of Diana in order to provide means for receiving and fixing elements in various positions so as to form desired openings in concrete elements (2:56-65).

9. **Claims 23-25 and 30-37** are rejected under 35 U.S.C. 103(a) as obvious over Diana (USPN 4769191) in view of Long (USPN 1571849). **As to Claim 23**, Diana teaches a method for casting [a] cementitious constructional elements with a facing comprising the steps of:

providing a mould comprising a “grid” defining a plurality of recesses therebetween (Fig. 8 and Fig. 1);

casting a facing material in the recesses of the mould (5:22-68);

casting a cementitious material to a desired thickness on top of the cast facing material (6:64-7:35); and removing the cast panel thus formed from the mould (inherent).

It is unclear whether Diana’s mask can be considered a “grid”, which is defined by a dictionary as: a network of uniformly spaced horizontal and perpendicular lines (as for locating

points on a map); *also* : something resembling such a network <a road *grid*>. The Examiner's position is that in Fig. 1, the structure shown is a "grid", and additionally that the structures of Fig. 17 and Fig. 8 (elements 60, 63, and 62 collectively) form a grid of uniformly spaced lines. However, in the alternative that the particular elements shown and disclosed cannot be considered a grid because they are not shown as uniformly spaced and perpendicularly arranged, it is the Examiner's position that the particular shapes and sizes of the block forms of Diana represents an artistic variable that could be varied to produce any desired appearance.

Diana is also silent to placing a mould mat in a mould. However, this aspect would have been prima facie obvious for two reasons. Firstly, it is generally considered prima facie obvious to make portions separable. See *In re Dulberg*, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961). In this case, it would have been considered desirable to provide a separable mat in order to provide the ability to vary the cross section, shape, or configuration of the mortar joints. Secondly, Long also teaches a mould mat (Fig. 3, Item 10). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Long into the method of Diana in order to provide the ability to vary the shape and configuration of the mortar spaces without fabricating a new mold for each design.

As to Claims 24 and 25, Diana teaches an insert grid pattern shaped to form recessed mortar joints (Fig. 7, item 32, 33, 34, 42) and placed into the mold. Diana appears to be silent to the claimed order in which *after* casting of the facing and prior to the cementitious material, the insert is placed over the grid pattern, the difference being a change in the order of process steps disclosed in the prior art. However, it has been held that selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results. See MPEP

2144.04 (IV)(C). The Examiner asserts that in this case it would have been prima facie obvious to rearrange the process steps of Diana in order to provide a roughened delineation between the simulated mortar joint and the simulated block. **As to Claims 30-32**, see 5:1-6:11, in particular 5:35-63. **As to Claim 33**, see Figs. 8 and 10 (Fig. 8, mask present, Fig. 10, mask removed). **As to Claim 34**, see Fig. 7, item 32 and Fig. 8, items 60 and 70. **As to Claim 35**, Diana removes the masking tool and leaves the mould surface remaining. **As to Claim 36**, Long places a mould mat in a mould box (Fig. 1) to produce a cementitious casting. **As to Claim 37**, see Fig. 7, items 47, 49, 50, and 5:22-6:11, and 7:40-54. The Examiner's position is that because muratic acid is used, which contains water and attacks masonry, that it would have inherently exposed more aggregates than were initially visible.

10. **Claims 26-29** are rejected under 35 U.S.C. 103(a) as obvious over Diana (USPN 4769191) in view of Long (USPN 1571849), and further in view of Woodring (USPN 2935936). **As to Claims 26-29**, Diana teaches a grid (see Claim 23) and casting of cement, but appears to be silent to the retaining force to retain the retaining grid in a desired position. However, Woodring teaches a step of applying a retaining force, a retaining cage or grid, a positioning tool, and engaging the insert and retaining the position of the insert (Figs. 1-4, item 18). Because Woodring's retaining grid are made from wire (4:15), they would obviously have some spring bias. It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Woodring into that of Diana in order to connect a detached portion and support it (4:5-15).

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11. **Claims 26-29** are rejected under 35 U.S.C. 103(a) as obvious over Diana (USPN 4769191) in view of Long (USPN 1571849), and further in view of Wunderlich, Jr. (USPN 4594205). As to **Claims 26-29**, Diana teaches a grid (see Claim 23) and casting of cement, but appears to be silent to the retaining force to retain the retaining grid in a desired position. However, Wunderlich, Jr. teaches that a strap is provided to retain a removable grid insert in a desired position (Fig. 5, Item 18 and 4:56-68). Because the element 18 of Wunderlich Jr. is disclosed as “strap members” (4:5), they would obviously have some spring bias, and would obviously engage the inserts. It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Wunderlich, Jr. into that of Diana in order to restrain inserts and prevent vertical movement of the inserts when the concrete is being poured (4:60-68).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Daniels whose telephone number is (571) 272-2450. The examiner can normally be reached on Monday - Friday, 8:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MJD 5/24/06



CHRISTINA JOHNSON
PRIMARY EXAMINER

5/25/06